

WHAT IS CLAIMED IS:

1           1. A method for encapsulating information in an encoded uniform  
2 resource identifier (URI) having a plurality of fields that is presented by a web site to a  
3 user for selection during an interaction session between the web site and the user, the  
4 method comprising steps of:

5                 choosing a URI field for encapsulating the information;

6                 determining first information that comprises at least one of second  
7 information and third information, wherein the third information is unrelated to the  
8 interaction session;

9                 formatting fifth information related to the first information to create sixth  
10 information;

11                 embedding the sixth information in the field to form the encoded URI; and  
12 presenting the encoded URI to the user.

1           2. The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 1,  
4 further comprising steps of:

5                 compressing the first information to create the third information; and  
6 encrypting the third information to create the fourth information.

1           3. The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 1,  
4 wherein a size of the encoded URI is limited to a range of about 4K to 8K characters.

1           4. The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 1,  
4 wherein the formatting step comprises formatting fourth information in base 64 to create  
5 sixth information.

1           5. The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 1,

4 further comprising a step of encrypting third information related to the first information to  
5 create the fourth information, wherein the encrypting step uses at least one of: code table  
6 encryption, symmetric key encryption, and asymmetric key encryption.

1                 6.         The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 1,  
4 further comprising a step of compressing the first information to create the third  
5 information, where the compressing step uses at least one of: gzip compression, zlib  
6 compression, run length encoding, and Huffman encoding.

1                 7.         The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 1,  
4 wherein the third information is gathered by the web site for the benefit of another web  
5 site indicated by the encoded URI.

1                 8.         The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 1,  
4 wherein the second information includes at least one of: a user identifier, a user  
5 authorization password, an association for the user, a credit amount associated with the  
6 user, cost quoted for a resource indicated by the encoded URI, rights associated with the  
7 user for content, the URI field if the URI field is replaced in the encoded URI.

1                 9.         The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 1,  
4 wherein the third information includes at least one of: an expiration for the encoded URI,  
5 mirror sites for a resource indicated by the encoded URI, an identifier indicating the web  
6 site that built the encoded URI, and status information for the web site.

1                 10.      The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 1,

4 further comprising a step of analyzing the first information to determine if the encoded  
5 URI has expired.

1           11. A method for encapsulating information in an encoded uniform  
2 resource identifier (URI) having a plurality of fields that is presented by a web site to a  
3 user for selection during an interaction session between the web site and the user, the  
4 method comprising steps of:

5                 choosing a URI field for encapsulating the information;  
6                 determining first information that comprises at least one of second  
7 information and third information;  
8                 compressing the first information to create the fourth information;  
9                 encrypting the fourth information to create the fifth information;  
10                 formatting fifth information to create sixth information;  
11                 embedding the sixth information in the field to form the encoded URI; and  
12                 presenting the encoded URI to the user.

1           12. The method for encapsulating information in the encoded URI  
2 having the plurality of fields that is presented by the web site to the user for selection  
3 during the interaction session between the web site and the user as recited in claim 11,  
4 wherein the third information is unrelated to the interaction session.

1           13. A method for decoding information in an encoded uniform  
2 resource identifier (URI) having a plurality of fields that is presented to a web site by a  
3 user where the encoded URI is produced during an interaction session between a referring  
4 web site and the user, the method comprising steps of:

5                 determining a URI field that encapsulates sixth information;  
6                 removing the sixth information from the URI field; and  
7                 unformatting the sixth information to produce fifth information related to  
8 first information, wherein:

9                         the first information comprises at least one of second and third  
10 information, and

11                         the third information is unrelated to the interaction session.

1           14. A uniform resource identifier (URI) embodied in a carrier wave,  
2 comprising:

3                   a scheme segment comprising a scheme for parsing the URI;  
4                   a scheme-specific segment comprising a payload portion and at least one  
5       of:  
6                   a host identifier,  
7                   path information, and  
8                   a file name, wherein the payload portion includes information that  
9       is at least one of formatted, compressed and encrypted.

1                   15.       The URI embodied in the carrier wave as recited in claim 14,  
2       wherein the information is both compressed and encrypted.

1                   16.       The URI embodied in the carrier wave as recited in claim 14,  
2       wherein the information is unrelated to an interaction session between a web site that built  
3       the URI and a user that selected the URI.

1                   17.       The URI embodied in the carrier wave as recited in claim 14,  
2       wherein the information is gathered by a web site that built the URI for the benefit of  
3       another web site indicated by the host identifier.

1                   18.       The URI embodied in the carrier wave as recited in claim 14,  
2       wherein the information includes user-related information.